DOCUMENT RESUME

ED 305 823 FL 017 947

AUTHOR Curtain, Helena; Martinez, Linda S.
TITLE Integrating the Elementary School Curriculum into the Foreign Language Class: Hints for the FLES Teacher. CLEAR Educational Report Series.
INSTITUTION California Univ., Los Angeles. Center for Language Education and Research.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO CLEAR-ER14
PUB DATE 89
CONTRACT 400-85-1010
NOTE 37p.
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Classroom Techniques; Cooperative Planning; *Curriculum Enrichment; *Elementary School Mathematics; *Elementary School Science; Elementary School Teachers; *FLES; Intermediate Grades; Language Teachers; Lesson Plans; Mathematics Instruction; Primary Education; Science Instruction; Second Language Instruction; *Social Studies
IDENTIFIERS *Content Area Teaching

ABSTRACT

Content-based instruction, a method of foreign language instruction in which the main topics being taught come from the regular content-area curriculum, is used in elementary school foreign language programs to integrate language development with content-area learning. This goal is accomplished by providing activities in which the learner's experiences are a vehicle for both language learning and content-area learning through which the learning of higher-level cognitive skills is possible. The guide to content-area teaching for teachers of foreign languages in the elementary schools (FLES) offers background and a rationale for content-based instruction, planning guidelines, and sample lesson plans in mathematics, science, and social studies. The discussion of background and rationale reviews current thinking and some research on the topic and gives some examples of the benefits of content-based instruction in mathematics, science, social studies, art, music, and physical education. The section on planning for content-based instruction presents specific guidelines for identifying appropriate curriculum, coordinating with content-classroom teachers, identifying instructional materials, and planning the lesson. Areas of concern are also examined. The sample lessons, designed to be carried out entirely in the target language, address a variety of grade levels. Additional activities are also suggested. A brief bibliography is appended. (MSE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

EDUCATIONAL REPORT SERIES

ED305823

INTEGRATING THE ELEMENTARY SCHOOL CURRICULUM INTO THE FOREIGN LANGUAGE CLASS; HINTS FOR THE FLES TEACHER

Helena Curtain
Linda S. Martínez

Center for Applied Linguistics

ER14

CLEAR

CENTER FOR LANGUAGE EDUCATION AND RESEARCH

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Tucker, G.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

FL017947

University of California, Los Angeles

INTEGRATING THE ELEMENTARY SCHOOL CURRICULUM INTO THE FOREIGN LANGUAGE CLASS; HINTS FOR THE FLES TEACHER

Helena Curtain
Linda S. Martínez

Center for Applied Linguistics
ER14

The project presented, or reported herein, was performed pursuant to a contract from the Office of Educational Research and Improvement/Department of Education (OERI/ED) for the Center for Language Education and Research (CLEAR). However, the opinions expressed herein do not necessarily reflect the position or policy of the OERI/ED and no official endorsement by the OERI/ED should be inferred.

Center for Language Education and Research
University of California
1989

Center for Language Education and Research

The Center for Language Education and Research (CLEAR) is funded by the Office of Educational Research and Improvement (OERI) to carry out a set of research and professional development activities relevant to the education of limited English proficient students and foreign language students. Located at the University of California, Los Angeles, CLEAR also has branches at the Center for Applied Linguistics in Washington, D.C., Yale University, Harvard University, and the University of California, Santa Barbara.

CLEAR believes that working toward a language-competent society should be among our nation's highest educational priorities. Thus, CLEAR is committed to assisting both non-native and native speakers of English to develop a high degree of academic proficiency in understanding, speaking, reading, and writing in English and a second or native language. To work toward this goal, CLEAR has united researchers from education, linguistics, psychology, anthropology, and sociology with practitioners, parents, and community agencies.

A coordinated set of research, instructional improvement, community involvement, and dissemination activities are oriented around three major themes: (a) improving the English proficiency and academic content knowledge of language minority students; (b) strengthening second language capacities through improved teaching and learning of foreign languages; and (c) improving research and practice in educational programs that jointly meet the needs of language minority and majority students.

The CLEAR Educational Report Series is designed for practitioners and laypersons interested in issues in second language education and foreign language teaching and research.

OERI Contract #400-85-1010

For further information contact:

Dr. Russell N. Campbell, Director
Center for Language Education and Research
1100 Glendon Avenue, Suite #1740
Los Angeles, CA 90024

INTEGRATING THE ELEMENTARY SCHOOL CURRICULUM INTO THE FOREIGN LANGUAGE CLASS: HINTS FOR THE FLES[1] TEACHER

Section 1: Background and Rationale

Content-based instruction is a method of foreign language instruction where the main topics being taught come from the regular curriculum or content areas (i.e., mathematics, social studies, science). The primary purpose of content-based instruction in elementary school foreign language programs is to integrate language development with content learning. This is accomplished by providing activities where the learner's experiences are a vehicle for both language learning and content learning. Content-based activities can also provide a framework for developing higher level cognitive skills.

This report is divided into three sections. The first gives background and rationale for content-based instruction. The second section provides planning guidelines for teachers wishing to implement content-based instruction in the classrooms. The third section provides sample lesson plans in mathematics, science and social studies for both the primary and intermediate grades.

Bernard Mohan (1986, p. 8) provides a convincing rationale for content-based instruction:

> Language is not just a medium of communication but a medium of learning across the curriculum. The goal of integration is both language learning and content learning. Content-based classrooms are not merely places where a student learns a second language; they are places where a student gains an education.

---

[1]Foreign Language in the Elementary School

Researchers and practitioners have identified the importance of using language in meaningful contexts. Language practitioners know that in order for meaningful communication to take place in a second language classroom, there must be an "information gap" or an "opinion gap." That is, some type of real information must be exchanged or real opinions shared. The communicative classroom must move beyond the empty manipulation of language found in situations where the teacher holds up an object, such as a pen, and asks, "What is this?" Of course, the answer is obvious because students do not have to think about the response beyond providing a label for the item in the target language. Questions found in content-based foreign language classrooms ask students to provide answers which are not known in advance, such as, "Which is heavier, the car or the ball?" "How does a rabbit move?"

When content-based instruction is incorporated into a Foreign Language in the Elementary School (FLES) program, language practice has a purpose other than the isolated manipulation of language features such as plurals or negatives or object pronouns.

Content-based instruction is holistic. It encompasses the rich texture of the curriculum and provides opportunities to call critical thinking skills into play. In addition to talking about the language itself and learning how to communicate, students also talk about things such as odd and even numbers, animal habitats, or latitude and longitude. They may engage in activities such as comparing the length of classroom objects, using a pan and pointer scale or graphing numbers of family pets. (See lesson plans in section three of this report). Research by Dulay, Burt and Krashen (1982) indicated that time spent in

content-based instruction provided more effective second language instruction than a language class alone.

Content-based instruction also helps to provide a solution to the frequent complaint that, in order to make a place for elementary school foreign language instruction in the curriculum, something else must be taken out. Integrating aspects of the regular curriculum into the FLES program demonstrates that the program is not a frill, but a central part of the regular academic program. Nothing needs to be removed from the curriculum in order to implement such a program. Incorporating content-based instruction into the FLES class shows the students that the foreign language can be used in different settings and for different purposes.

Examples of content-based instruction can be found in bilingual education programs where students are placed in "sheltered" content and English classes. In those classes, students receive instruction through strategies especially adapted to their limited language proficiency. Other examples of content-based instruction can be found in elementary school foreign language immersion programs. In immersion programs, the usual curriculum activities are conducted in the second language. This means that the second language is the medium as well as the object of instruction. Students learn both the second language and content through the second language. Immersion programs, and "sheltered" content classes in bilingual education programs, demonstrate the successful results of content-based instruction. Some of these activities can be accomplished even through the language skills of students in FLES programs are much more limited than those of students in immersion and bilingual programs.

Content-Based Instruction in Various Subject Areas

Many areas of the curriculum are suitable for content-based FLES instruction. The following paragraphs present examples in mathematics, science, social studies, art, music, and physical education.

Mathematics

In elementary school mathematics, activity-oriented instruction and the use of manipulatives provide an appropriate vehicle for content instruction combined with language instruction. Computations and problem-solving provide the concrete contexts necessary for the meaningful exchange of information. The vocabulary of mathematics, especially at the lower elementary level, is simple and results in a low vocabulary load in the foreign language class.

Science

In elementary school science lessons, students are encouraged to develop skills in problem solving such as observing, comparing, classifying and predicting. Concrete contexts can be provided by hands-on activities and experimental activities. These activities are well-suited to teaching both language and content at the same time, and well-suited to furthering development of higher order thinking skills. Some science topics require a high number of vocabulary items. In these cases, science vocabulary must be carefully chosen when planning lessons. Often, the high number of vocabulary items is offset by the fact that many of these words are closely related to English, and thus, easily recognizable to the students.

Social Studies

The elementary school social studies curriculum begins with the immediate environment. Children learn about themselves, the family,

the school, and the neighborhood. Students map and graph items in their classroom and in their neighborhood. Especially in the early grades, the social studies curriculum is experiential and activity-oriented and provides the necessary meaningful context for language instruction.

The elementary school social studies curriculum deals with many of the same concepts often taught in the FLES curriculum. Whereas in the primary grades the level of vocabulary in social studies classes is manageable, in the intermediate and upper elementary grades, the vocabulary load can be extremely high. In the intermediate and upper grades, therefore, concepts taught through the second language must be very carefully chosen.

Art, Music and Physical Education

Because art, music and physical education are activity-oriented, little background language is required for meaningful participation in them. These subject areas also lend themselves to practice in following directions, a skill that is essential for beginning foreign language students.

Section 2: Planning for Content-Based Instruction

In planning for content-based instruction, teachers must keep three things in mind: (1) the language skills needed by the students; (2) the content skills that will correlate with the language skills; and (3) the cognitive skills that are necessary to complete the lesson.

The following guidelines are addressed to teachers who are planning content-based FLES classes. They have been organized according to five major areas: identifying curriculum, coordinating with classroom content teachers, identifying instructional materials, planning the lesson and evaluating the lesson.

Identifying Curriculum

1. Become familiar with the curriculum outside of the language strand. Look at the school's curriculum guides, textbooks, other instructional materials, and the charts of competencies in basic skills, that are used in the school district.

2. Compare the regular curriculum with the language curriculum currently in place. Determine whether any areas of overlap already exist. Consider the vocabulary and language functions the students need in the various subject areas.

3. Select the appropriate curriculum concept(s)--the ones that lend themselves to activity-oriented approaches--and incorporate them into the FLES curriculum.

4. Include culture as part of the content. Identify cultural information and concepts which can be integrated with the subject area. For example, nutrition units would have a cultural content if foods from the target culture were compared with American foods.

5. Incorporate global education concepts where possible. For example, rather than focusing on just one country where the language is spoken, it would be appropriate to teach about all the countries where the target language is spoken, or at least as many as possible depending on the age of the students.

Coordinating with Content-Classroom Teachers

6. Communicate with the content-classroom teachers and inform them of the areas in the basic curriculum that will be reinforced in the FLES class. In this way, both strands can be coordinated. Specialist teachers who do not have their own classroom, as is the case with many elementary foreign language teachers, may coordinate their teaching with the curriculum set for the school and use that as the focal point. It is important to reinforce the regular curriculum, either by introducing certain content lessons in the FLES class which the content-classroom teacher would subsequently elaborate, or vice versa. Reinforcing the regular curriculum in the elementary school foreign language class may help to provide the repetition that some students need in order to master concepts.

Identifying Instructional Materials

7. Identify the instructional materials to be used. If necessary, simplify the instructional materials if the print involved is too difficult, or amplify them if they do not provide enough concrete context for foreign language students. Translate materials as needed. (If much of the material needs to be translated, it may be necessary to request additional curriculum-writing time.)

8. Make sure that the materials needed to teach the particular lessons are readily available (and that they are portable, in the case of traveling teachers who do not have their own classrooms).

9. Examine English as a Second Language (ESL) and bilingual education curricula as sources for lessons. They can provide good models.

10. Use authentic materials where possible. Simplify them for the students by extracting the main ideas. Ask students to look for global concepts rather than to focus on a lot of detail. Beginning level target language subject content textbooks and workbooks used in the country where the target language is spoken are a good source of authentic content-based materials.

Planning the Lesson

11. Identify the language needed. Include both specialized content vocabulary for the particular subject area and the rest of the lesson. Decide how much content vocabulary can reasonably be taught in the second language.

12. Plan active hands-on strategies for helping students understand the concepts. These strategies should not demand heavy verbal involvement of the students but should focus on receptive language. Surround the activity with language. Use visuals, demonstrations and vocabulary the students already know to explain the new content vocabulary. Make sure the components of the lesson are observable and manipulable.

13. Incorporate methodologies that stress the importance of meaningful communication over grammar, and that also stress the importance of concrete context. Total Physical Response (see Asher,

1986) and Natural Approach (see Krashen & Terrell, 1983) activities can help to provide the meaningful context necessary in content-based classes.

14. Focus on the main point or overall objective of the lesson. For example, in a lesson on vertebrates and invertebrates, the FLES teacher would focus only on a list of animals that fall into each category, but in the science classroom, the teacher would extend the lesson to include body coverings (fur, scales, feathers, and skin), habitat, number and type of body parts, types of insects, animals with lungs vs. those with gills, and so forth.

In another example, a lesson on magnets, the FLES teacher would introduce the concept that magnets attract metals but not wood, rocks, plastic, or paper. The content-classroom teacher would extend the lesson to teach that magnets attract only those metals that contain iron, steel, nickel or cobalt.

15. Present concepts in a way that challenges the students' thinking skills. For example, instead of simply naming animals, children can be asked to classify them as vertebrates and invertebrates; instead of simply labeling food items, children can be asked to plan menus that meet a variety of criteria.

16. Incorporate reading and writing skills into every lesson, especially for older students. Reading and writing activities should be developed directly from the content lessons. For example, if a graph were developed in a mathematics lesson, the students could read and/or write sentences based on the graph. For a lesson on magnets, the students could make a booklet based on that lesson. Integrating classroom activities with reading and writing activities is an

important component of the whole language approach. (See For Further Reading section pp. 29-30.)

Evaluating the Lesson

17. Evaluation is an important component of each lesson. In addition to evaluating the content-based FLES lesson itself, it is important to communicate with classroom teachers about successful strategies and to rethink those which may need improvement.

Areas of Concern in Content-Based Instruction

There are several areas of concern which must be considered when planning for content-based instruction.

1. Providing a watered-down curriculum is a danger to be avoided. The content-based foreign language curriculum should not be seen as a substitute for the regular curriculum, but as a means of reinforcing the regular curriculum. (In partial immersion and total immersion programs, where teachers have sufficient time to develop all concepts needed in the second language and take responsibility for certain subject areas in the curriculum, this does not apply.)

2. Because of the amount of vocabulary involved, and the complexity of the subject matter, implementing content-based instruction is more difficult at the intermediate and upper elementary levels than at the primary levels.

3. Simplifying the vocabulary used is one of the procedures for incorporating content-based instruction in FLES classes. This language simplification should not result in concept simplification. The development of higher order thinking skills and concepts must be a central concern.

4. Progress in the productive skills of speaking and writing is much slower than in the receptive skills of listening and reading. Much of the content-based activity will focus on the receptive skills.

5. Due to time limitations, the FLES teacher may not have enough time to deal with an entire content unit, but may be able to deal only with selected concepts from that unit.

6. It may be difficult for the traveling teacher to obtain appropriate materials. Since most science activities stress the discovery approach, a large number of different items are needed. For example, a lesson on sound may require a tuning fork and other examples of materials that produce sound by vibration.

Conclusion

The concept of combining language and content instruction in FLES classes is relatively new, and additional insights are being gained every day. Teachers need to keep up-to-date with developments in the field. New and appropriate commercial materials may become available at any time. However, at present, the integration of language and content instruction must be planned and carried out mainly through the leadership of the elementary school foreign language teacher.

Planning content-based instruction is a challenging undertaking, but it can result in better language teaching and learning. Content-based language programs are not planned in isolation, but within the framework of the entire curriculum. Incorporating content-based instruction into the FLES classroom is a way of providing a meaningful context for language instruction while at the same time providing a vehicle for increasing academic skills.

Section 3: Sample Content-Based Lessons in Mathematics, Science and Social Studies for Primary and Intermediate Grades

The following lesson plans are examples of methodologies appropriate for content-based FLES instruction and indicate the components and steps involved in a successful content-based lesson. An additional list of lesson topics at the end is intended to suggest other possibilities for content-based lessons. Finally, although the lessons in this section are presented in English, they are designed to be carried out entirely in the target language.

The lessons are planned around the following parameters. (Note that some of these criteria may not apply in every school district.)

- They are designed for use in a program which has a minimum of 30 minutes per day of instruction (90 hours per year).
- They are beginning lessons for primary (Grades K, 1, 2, and 3) and intermediate (Grades 4, 5, and 6) students.
- They have been developed to reinforce the regular elementary school curriculum.
- They are portable and not dependent on elaborate set-ups that are not feasible for the itinerant FLES teacher.
- They can be used with whole-group instruction.
- They provide a concrete context.
- Lesson components are observable and manipulable.
- Needed materials are low cost or readily available.
- Critical thinking skills are emphasized as much as possible.

- In instances where vocabulary development is necessary, total physical response (Asher, 1986) methodology has been suggested. A combination of other methodologies or approaches could also be successfully used.

MATHEMATICS

Title: Comparing the Length of Classroom Objects

Grade Level: Primary

Second Language Objectives:

-- When directed by the teacher in the second language, the students will measure different classroom objects by using a paper clip as the unit of measurement.

-- The students will identify the length of different classroom objects in the second language.

-- The students will record the lengths on a chart and interpret the chart in the second language.

Content Objectives:

-- The students will measure and compare lengths of different objects using a non-standard unit of measurement.

Second Language Vocabulary:

Receptive Language: Measure, length, paper clip, longer, shorter, longest, shortest, equal, point, touch, put
"Give me the ____." "Is this a ____?"

Productive Language: pencil, crayon, pen, chalk, chalkboard eraser, scissors, numbers from 0-20
"Yes, it is a ____."

Materials Needed:

-- a small table for demonstrating the classroom objects

-- a marking pen (permanent or water color)

-- one each of the following: pencil, crayon, chalkboard, eraser, pair of scissors, pen, piece of chalk

-- 10-20 paper clips

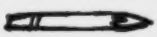
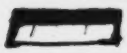
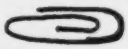
-- a set of number flashcards from 0-20

-- a small beanbag

-- 6 rolls of gummed paper (assorted colors) cut into one-inch squares.

-- a pictograph (to show the number of paper clips each object measured) made from Kraft or chart paper. You can draw the

classroom objects or cut pictures from magazines or school supply catalogs, or you can glue the actual item to the chart. (See chart below)

How Long is a .....?	
	□□□□□
	□□□
	
etc.	
Key: □ = 1 	

Procedure:

1. If students do not know the vocabulary for the classroom objects, use the actual objects and Total Physical Response (TPR) activities to introduce the vocabulary. Use different commands such as: "Point to the crayon." "Touch the eraser." "Put the pencil on the table."

2. Have the student practice the numbers 0-20 by counting various objects in the room, items on picture cards or by playing a circle game with the number flashcards. Gather the class in a circle on the floor. Have the students pass a bean bag around the circle until you give a signal to stop. The student with the bean bag must identify the number on the flashcard that you show to him or her.

3. Begin by demonstrating how to measure the classroom objects by lining paper clips end to end along the length of an object. Use the scissors to demonstrate the procedure. Place the scissors on a table or desk top where the students can easily observe the measurement.

4. Say, "How long do you think the scissors are? Let's use a paper clip to measure the scissors. How many paper clips will we need?" After measuring the scissors lead the class in counting the number of paper clips. Record this number on the pictograph that is displayed behind you. Refer to the key on the pictograph which states that one square equals one paper clip. Stick the correct number of gummed paper squares (sticky tape) next to the picture of the scissors on the graph.

5. Call on volunteers to come to the table and help measure and record the remaining classroom objects. As each item is about to be measured, say to the volunteer, "Point to the pencil. Give me the pencil." Show the object to the class and say, "Is this a pencil?" The class should respond with "Yes, it is a pencil." Repeat this procedure with the remaining objects. Record the length of each object with the gummed paper squares.

Evaluation: After all of the items have been measured and recorded on the chart, check the students' comprehension of the lesson by asking the following questions. Point to the chart and say: "Which is longer, the pencil or the pen? Which object is the shortest? Which object is the longest? Which two are equal in length?"

MATHEMATICS

Title: Finding the Perimeter and Area in Centimeters

Grade Level: Intermediate

Second Language Objectives:

-- When directed by the teacher in the second language, the students will measure different classroom objects.

-- The students will give the length, width, perimeter and area of different classroom objects in the second language.

Content Objectives:

-- The students will use a metric ruler and a meter stick to measure objects in centimeters.

Second Language Vocabulary:

Receptive Language: measure, length, width, perimeter, area, metric ruler, meter stick, long, wide, add, multiply
"How long is ____?" "How wide is ____?"

Productive Language: pupil desk, teacher desk, map, chalkboard, door, bulletin board, projection screen, table, book, centimeters, numbers 0-1000
"It is ____ centimeters." "It is ____ meters."

Materials Needed:

-- 2 metric rulers and 2 meter sticks for each small group

-- 1 copy (8½ x 11) of the perimeter and area chart for each small group

-- pencils for recording measurements

-- large Perimeter and Area Chart made from Kraft or Chart Paper. You can list the classroom objects on the chart or use drawings or pictures cut from magazines or supply catalogs. (See example below)

-- number flash cards (use an assortment of numbers in the 0-1000 range but concentrating on the higher numbers)

Classroom Objects	Length (centimeters)	Width (centimeters)	Perimeter (length + width x 2)	Area (length x width)
1. book				
2. pupil desk				
3. chalkboard				
4. etc.				

Procedure:

1. If the students do not know the vocabulary for classroom objects, use the actual objects or pictures of the objects and Total Physical Response (TPR) activities to introduce the vocabulary. Use different commands such as: "Point to the map." "Touch the chalkboard." "Walk to the door."

2. Practice the numbers 0-1000 by using the number flashcards. Place the cards face down and ask the students to pick a card and say the number in the second language. Send two students to the chalkboard and give a number in the second language, the first to correctly write the number wins. The practice should concentrate on the higher numbers which will be needed for the measuring of the classroom objects.

3. Demonstrate how to measure the classroom objects for their length, width, perimeter and area. Teach the procedure by measuring a book. The students will only be measuring flat surfaces. Display the large perimeter and area chart behind the teacher. Hold up the book and say, "How long is this book? Let's measure the book with the ruler." Give the answer using centimeters. Say, "The book is ____ centimeters long." Write the number of centimeters under the length column on the large chart. Next measure the width. Say, "How wide is the book? The book is ____ centimeters wide." Write the number of centimeters under the width column. Next demonstrate how to add the length and width and then multiply the answer by two to get the perimeter. Write the answer under the appropriate column. Do the same for the area (which is the length times the width), and then write the number under the appropriate column on the chart.

4. Demonstrate how to use the meter stick by measuring a tabletop in the classroom. Follow the same procedure as stated above.

5. Divide the class into small groups. Give each group 2 meter sticks, 2 metric rulers, a copy of the perimeter and area chart, and pencils for recording the measurements. Assign each group 2 or 3 classroom objects from the chart to measure. Give the students 8-10 minutes to complete their measurements.

Evaluation: Summarize the activity by having the pupils return to their desks after they have completed their tasks. Check the students' comprehension of the lesson by asking individuals to answer the following questions. Say, "What is the area of the map?" or "What is the perimeter of the pupil's desk?" The students should say, "It is ____ centimeters," or "It is ____ meters."

SCIENCE

Title: How Animals Move and Where They Live

Grade Level: Primary

Second Language Objectives:

-- When shown a picture of an animal, the students will be able to name the animal in the second language.

-- When directed by the teacher in the second language, the students will perform the movement of the animal named.

-- When directed by the teacher in the second language, the students will classify the animal picture cards according to how they move and where they live.

Content Objectives:

-- The students will observe and describe animal differences and classify these differences according to how the animal moves and where it lives.

Second Language Vocabulary:

Receptive Language: flies, swims, hops, follow, point, classify
"What is this?" "It lives here."

Productive Language: rabbit, frog, turtle, fish, robin, owl
"It is _____."

Materials Needed:

-- pictures of the following animals: rabbit, frog, turtle, fish, robin, owl

-- pictures of the following habitats: water, land, sky

-- three shoe boxes (decorate the boxes with construction paper; glue one of the following pictures on each of the boxes: an airplane, a swimmer, a pogo stick; pictures can be found in magazines or catalogs)

-- cassette of instrumental background music

-- a roll of masking tape

Procedure:

1. If the students do not know the animal names, use the animal pictures and Total Physical Response (TPR) to introduce the vocabulary. Use different commands such as: "Point to the frog." "Touch the turtle." or "Give the owl to a classmate."

2. Provide additional practice for naming the animals in the second language by having the students classify them according to habitat. Tape the pictures of the following habitats on the chalkboard: land, water, and sky. Show the pictures of the fish to the class. Say, "What is this?" The class should respond: "It lives here." Call on volunteers to name the remaining animal pictures and to place them under the correct habitat.

3. Next, play the cassette of background instrumental music. The music should evoke an image of the animal habitat. For example, the sounds of a babbling brook could represent water or sounds of animals in the woods (e.g., squirrels chattering) could represent land. As the music plays, show the class an animal picture and have them perform the movement of that animal to the music. Show a picture and say: "The fish swims." Then do the movement. Continue to do this for all of the animal pictures.

Evaluation: Check the students on their ability to name and classify the animals introduced in this lesson. End the activity by having the children sit on the floor. Place the three boxes in front of them. Direct their attention to the pictures on the boxes. Review the vocabulary from the animal movements (hops, swims, flies) by giving TPR commands. Say: "Hop five times." "Fly to the chair." or "Swim to the chalkboard." Show the students an animal picture and say: "What is this?" They answer: "It is a _____." Demonstrate how they should classify the animal pictures according to movement. Show the picture of the rabbit and after the student names the animal, place it in the box decorated with the pogo stick (because it hops). Call on volunteers to name and classify the remaining animal pictures.

SCIENCE

Title: Using a Pan and Pointer Scale

Grade Level: Intermediate

Second Language Objectives:

-- Using a pan and pointer scale, the students will weigh different objects and describe the weight in the second language.

-- Using a pan and pointer scale, the students will weigh different objects, record the weights on a graph and interpret the graph in the second language.

Content Objectives:

-- The students will use a scale to measure and collect data.

-- The students will record and interpret data from a graph.

Second Language Vocabulary:

Receptive Language: weighs, lighter, heavier, most, least, scale, thing, toy car, rubber ball, rock, book, stapler, object

Productive Language: weighs, ounces, numbers 0-50

Materials Needed:

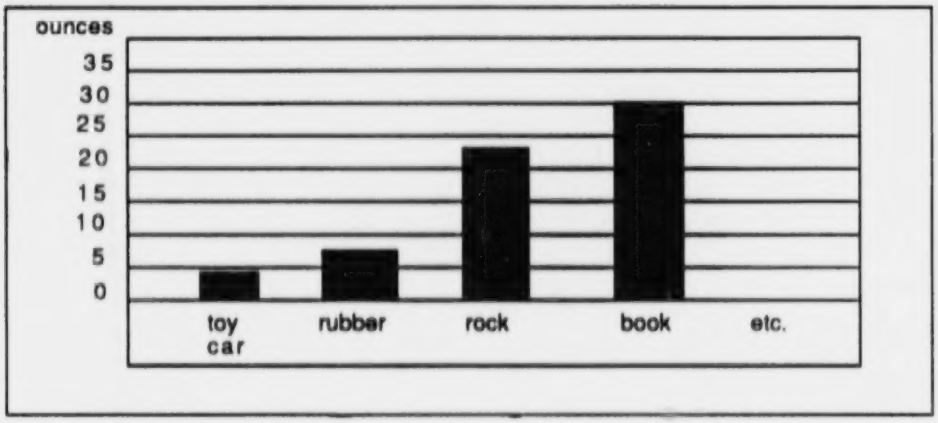
-- a pan and pointer scale

-- objects for weighing: toy car, small rubber ball, rock, book, stapler

-- a marking pen (permanent or water color)

-- a large bar graph made from Kraft or chart paper. (see example below) Drawings or pictures cut from magazines can be used to illustrate the items on the chart.

-- number flashcards 0-50



Procedure:

1. If the students do not know the vocabulary for the objects to be weighed, use Total Physical Response (TPR) to introduce the vocabulary. Use different commands such as "Touch the rock." "Give me the car." or "Point to the ball."

2. Practice the numbers 0-50 by using number flashcards. Place the cards face down and ask the students to pick a card and say the number in the second language. Provide additional practice with the numbers by playing a relay game. Call on two volunteers. Say a number from 0-50 in the second language. The first student who writes the correct number on the chalkboard and returns to his/her seat is the winner.

3. Place the scale on a table where the students can see it clearly. Display the bar graph behind the teacher. Demonstrate how each object will be weighed and recorded on the graph. Use the toy car to teach the procedure. Pick up the car and say, "How much does the car weigh?" Place the car on the scale and read the ounces aloud to the class. Say, "It weighs ____ ounces." Record the number of ounces on the graph.

4. Call on volunteers to come to the table and help weigh and record the remaining objects. As each item is about to be weighed, say to the volunteer, "Point to the ball. Put the ball on the scale. How many ounces does it weigh?" The student should respond with, "It weighs _____ ounces." Have the student record the weight on the graph.

Evaluation: Check the students' ability to interpret the graph in the second language by asking volunteers to make weight comparisons by reading the graph. Ask: "Which object weighs the most?" "Which object weighs the least?" "Which is heavier, the car or the ball?" and so forth. If the students cannot name the object in the second language then have them point to the item on the graph when making the comparisons. Use hand gestures to help the students comprehend the terms "heavier," lighter," "most," and so on.

SOCIAL STUDIES

Title: Our Favorite Pets

Grade Level: Primary

Second Language Objectives:

Receptive Language: more, less, owners
"Who has a dog?" "How many children have a fish?" "What is this?"

Productive Language: dog, cat, goldfish, bird, hamster, etc.
numbers 0-20
"It is a _____."

Content Objectives:

-- The students will use a pictograph to compare and record data.

-- The students will interpret the data on the pictograph.

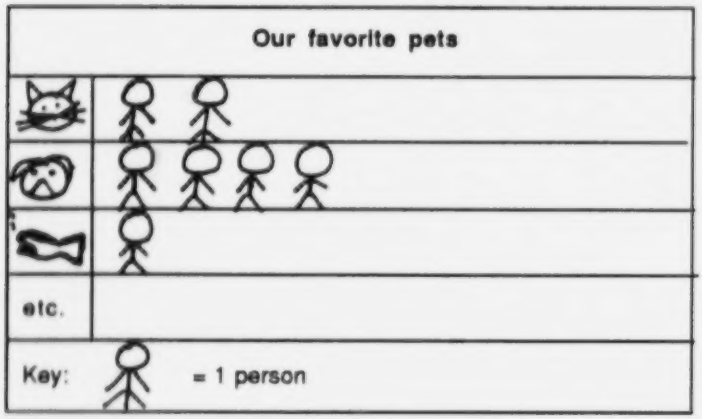
Materials Needed:

-- Pictures of a dog, a cat, a bird, a goldfish, a hamster

-- 20-25 picture cut-outs of children (can also be stick drawings)

-- a photograph of the teacher and his/her pet (can be teacher's own pet or borrowed)

-- a large pictograph to show number of pet owners, made from Kraft or chart paper. (See chart below.)



Procedure:

1. If the students do not know the vocabulary for the animal names, use Total Physical Response (TPR) to introduce the vocabulary. Use different commands such as: "Touch the hamster." "Point to the cat." or "Give the bird to a classmate."

2. Show the photograph of the teacher and his/her pet. Tell the class that this is the teacher's pet. Say, "This is my dog. His name is ____."

3. Show the animal pictures. Ask: "What is this?" The student should respond: "It is a _____ ." Then ask: "Who has a cat?" and so forth. The students should respond by raising their hands to indicate if they have that kind of a family pet. Count the raised hands and record the number of students who have that kind of pet on the pictograph. Do this by gluing the same number of cut-out pictures of children as the number of raised hands.

4. Display the pictograph to the class. While pointing to the different animals on the graph, motion to the students to raise their hands if they have that kind of a pet. Count the raised hands. Demonstrate that the same number of cut-out pictures of children as the number of raised hands will be glued onto the pictograph. Call on volunteers to help glue the cut-outs for the remaining animals.

Evaluation: Check the students' ability to interpret the graph by answering the following questions. Say, "How many children had dogs? How many children had fish?" and so forth. Ask, "Which animal had more owners? Which animal had fewer owners?"

SOCIAL STUDIES

Title: Exploring Merged Relief Maps

Grade Level: Intermediate

Second Language Objectives:

-- Using a merged relief map, the students will identify the color used to represent various altitudes in the second language.

-- Using a merged relief map, the students will give the altitude of different states in the second language.

-- Using a merged relief map, the students will locate the national and state capitals when directed by the teacher in the second language.

Content Objectives:

-- The students will use a map to gather geographic data.

Second Language Vocabulary:

Receptive Vocabulary: merged relief map, legend, represents, altitude, national capital, state capitals, touch

Productive Language: the following color words: green, yellow, brown, orange, red, numbers 500-10,000 feet

Materials Needed:

-- a merged relief map

-- colored chalk

-- large colored circle (12" diameter)

Procedure:

1. Using colored circles, practice the color words by doing different TPR activities. For example, say, "Put the red circle on your desk. Put the green circle on the chair. Go to the board and draw a blue circle," and so forth.

2. To check the students' productive language with the color words, hold up a colored circle and say, "Is this an orange circle?" The students should respond, "Yes, it is orange." Do this with all of the color words.

3. To practice the numbers 500-10,000, call on two students to go to the board. Say a number in the second language; the first to write down the number correctly is the winner. Before the student can return to his/her desk, the student must say the number in the second language.

4. Display the map to the students. Bring their attention to the legend. Ask the following, "What color represents 0-500 feet?" Demonstrate the answer by saying, "Green is 0-500 feet." Call on volunteers to give the colors and altitudes listed on the legend.

Evaluation: Check the students' ability to read a merged relief map by asking them to locate the national and state capitals and by giving the average altitude found in different states. Call on individuals and say: "What is the altitude of Louisiana, Colorado or Wisconsin?" the students should respond with the altitude in the second language. Point out the symbols for the national and state capitals given on the legend. Say: "Where is the capital of the U.S.?" Next touch Washington, D.C. on the map. Call on volunteers to touch and say the capitals of the states you give them. Give a TPR command such as, "Go to the map and touch the capital of Georgia."

ADDITIONAL ACTIVITIES

Mathematics

-- Identify basic shapes

-- Identify sphere, cube, cone, cylinder

-- Identify congruent figures

-- Measure liquids, quart, gallon, pint

-- Use symbols

-- Use a number line for simple addition and subtraction

-- Measure with a measuring tape. (body parts, classroom objects)

-- Sort by size, shape, thickness (attribute blocks)

-- Use fractions 1/4, 1/2, 1/3 to see which is larger or smaller

-- Use a 2-pan balance to compare weights of objects

-- Give the correct amount of change after a purchase of $1.00 or less

-- Measure capacity and volume of various containers

Science

-- Chart weight, height, eye or hair color

-- Investigate teeth

-- Investigate the five senses

-- Investigate the four basic food groups

-- Classify living and non-living objects

-- Identify body coverings for animals

-- Chart the weather (rain fall, snow fall)

-- Use a thermometer

-- Investigate magnets

-- Identify sounds as high, low, loud or soft

-- Classify objects that sink and float

-- Classify communities as city, suburban or rural

-- Locate cities and countries by latitude and longitude

-- Recognize political borders of countries

-- Identify the seven continents and five oceans

Social Studies

-- Identify countries that speak Spanish (or another language)

-- Locate highest/lowest elevations on a merged relief map

-- Study family relationships (mother, father, sister, brother, aunt, uncle, etc.)

-- Use a map scale to measure distance between cities

-- Use compass rose to locate different cities on a map

-- Use a grid system to identify and locate states on U.S. map

-- Use a bar graph to record family size, family pets, birthdays, etc.

-- Classify vehicles according to modes of travel: air, land, sea

-- Use a map key for interpreting items on a map

References

Asher, J. J. (1986). Learning another language through actions: The complete teacher's guidebook, 3rd edition. Los Gatos, CA: Sky Oaks Publications.

Dulay, H., Burt, M., & Krashen, S. (1982). Language two. New York: Oxford University Press.

Krashen, S. M, & Terrell, T. (1983). The natural approach: Language acquisition in the classroom. Oxford: Pergammon Press.

Mohan, B. (1986). Language and content. Reading, MA: Addison Wesley.

For Further Reading

Andrade, C., Pesola, C. A., & Christian, D. (1986). Strategies for integrating language and content instruction: Art, music and physical education. Washington, DC: Center for Language Education and Research (CLEAR), Center for Applied Linguistics.

Cantoni-Harvey, G. (1987). Content-area language instruction: Approaches and strategies. Reading, MA: Addison-Wesley.

Costa, A. L. (Ed.). (1985). Developing minds: A resource book for teaching thinking. Alexandria, VA: Association for Supervision and Curriculum Development. Reference work for thinking skills.

Crandall, J. (Ed.). (1987). ESL through content-area instruction: Math, science, social studies. Englewood Cliffs, NJ: Prentice Hall. Focus is at the secondary level, but concepts presented can be applied at any level.

Curtain, H. A., & Pesola, C. A. (1988). Languages and children: Making the match. Reading, MA: Addison-Wesley. See especially chapter 7, "Drawing on the whole curriculum: Content based instruction".

Enright, S. D. & McCloskey, M. L. (1988). Integrating English. Reading, MA: Addison Wesley. Useful for practical ideas on how to integrate language and content instruction. Although the focus is on English as a second language, the concepts can readily be adapted to FLES classes.

Goodman, K. (1986). What's whole about whole language? Portsmouth, NH: Heinemann Educational Book. Explains the whole language

movement, and the importance of integrating different parts of the curriculum.

Schifini, A. & Galvan, J. L. (1986). Sheltered English: Past, present, and future. California Association for Bilingual Education, October.

Snow, M. A. (1987). The Immersion Teacher Handbook. Los Angeles: UCLA, Center for Language Education and Research (CLEAR). Educational Report No. 10. Contains a list of strategies that would be useful in any content-based lesson.

Willetts, K. F. (Ed.). (1986). Integrating language and content instruction. Los Angeles: UCLA, Center for Language Education and Research (CLEAR).

Winocur, S. L. (1985). Developing lesson plans with cognitive objectives. In Arthur S. Costa (Ed.), Developing minds: A resource book for teaching thinking. Alexandria, VA: Association for Supervision and Curriculum Development.

ABOUT THE AUTHORS

Helena A. Curtain (M.S. Curriculum and Instruction, University of Wisconsin-Milwaukee, 1979) currently Foreign Language Curriculum Specialist for the Milwaukee Public Schools. Her responsibilities involve coordination of the K-12 foreign language program, including FLES and immersion programs at the elementary level. Her main areas of interest are elementary school foreign language education and teacher preparation.

Linda S. Martinez (M.S. Curriculum and Instruction, University of Wisconsin-Milwaukee, 1983) currently K-6 FLES teacher in content-based program in Elmbrook School District in Elm Grove, Wisconsin. In the past she worked in the Milwaukee Public Schools as an immersion teacher and also as a bilingual teacher. She is involved in the development of FLES curriculum and materials. Her main areas of interest are FLES and immersion language education and teacher preparation in those areas.